

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/837,739	04/06/2001		Jim Reich	540606-2001	9745	
20999	7590	06/03/2003				
		ENCE & HAUG - 10TH FL.	EXAMINER			
NEW YOR				RUDDOCK, UL	LA CORINNA	
				ART UNIT	PAPER NUMBER	
				1771	9	
			•	DATE MAILED: 06/03/2003	ı	

Please find below and/or attached an Office communication concerning this application or proceeding.

	<u> </u>		A3-				
`•		Application No.	plicant(s)				
•	Office Action Comments	09/837,739	REICH, JIM				
	Office Action Summary	Examiner	Art Unit				
	The HAU MO DATE of the	Ula C Ruddock	1771				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
THE I - External after - If the - If NC - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply ly within the statutory minimum of thirty (3 will apply and will expire SIX (6) MONTHS	of be timely filed  0) days will be considered timely.  5 from the mailing date of this communication.				
	Pospopojuo to communication(a) filed are 05	M 0000					
1) <u></u> 2a)⊠	Responsive to communication(s) filed on <u>25 /</u>	<del></del>					
· —		nis action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
·	Claim(s) 1-14 is/are pending in the application	1.					
	4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
	6) ☐ Claim(s) <u>1-11</u> is/are rejected.						
	<b>-</b>						
8)[	Claim(s) are subject to restriction and/o on Papers	r election requirement.					
	The specification is objected to by the Examine	r					
	·		Evenines				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority u	nder 35 U.S.C. §§ 119 and 120		,				
13)[	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
_	☐ All b)☐ Some * c)☐ None of:						
	1. Certified copies of the priority documents	s have been received.					
	2. Certified copies of the priority documents		cation No.				
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))						
* See the attached detailed Office action for a list of the certified copies not received.							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment		,,	3.10.01 12.1.				
2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)				
Patent and Tra	de						

Art Unit: 1771

#### **DETAILED ACTION**

#### **Protest**

- 1. A protest against issuance of a patent based upon this application has been filed under 37 CFR 1.291(a) on October 29, 2002. It is suggested that Applicant refer to MPEP 1900 for further clarification.
- 2. The Examiner has carefully considered Applicant's amendments and accompanying remarks filed March 25, 2003. The rejections in view of Svoboda et al. (US 6,158,253) and Knieler et al. (US 6,160,196) have been overcome by the present amendment.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended all the claims to read on "an antimicrobial <u>yarn</u>." The newly added limitation of a "yarn" is considered new matter because there is no support for the amendment in the specification. Applicant fails to describe the antimicrobial "yarn" as a yarn comprising first and second fibers.

Art Unit: 1771

## Claim Rejections - 35 USC § 102/103

6. Claims 1-7 and 9-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Marier et al. (US 5,994,245). Marier et al. disclose a laminated product that comprises a fibrous mat (abstract). The fibrous mat includes polyester fibers (col 3, In 26-28). The fibrous mat may also comprise fibers with specific functions (col 3, In 30-31). For example, fibers containing agents preventing fungus or bacteria growth such as an acetate fiber under the name MICROSAFE may be suitable (col 3, In 44-50). It should be noted that MICROSAFE is a textile product comprising acetate fibers coextruded with Triclosan (col 1, ln 56-60 of Chan et al. (US 6,461,386)). The fibers prevent bad odors due to bacteria growth (col 5, In 32). With regard to the intended use statements of claims 9-11, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987). Furthermore, Marier et al. disclose that the mixture of fibers is needled together (col 3, In 60-62). It should be noted that a yarn, by definition, is a strand of textile fibers that are held together. As a result, it is the Examiner's position that Marier's fibrous mat is composed of a yarn since there are two fibers being needled together to form the mat.

With regard to the newly added limitation that the first and second fibers are entwined with one another through the use of at least one air jet, Marier et al. fail to disclose that the fibers are entwined with one another through the use of at least one air jet. Marier do disclose

Art Unit: 1771

that the mixture of fibers is needled together (col 3, In 60-62). It should be noted that the method of forming an article is not germane to the issue of patentability of the article itself. It is the Examiner's position that the fibrous mat of Marier et al. is identical to or only slightly different than the fiber mixture prepared by the method of the claims, because both fibrous mixtures comprise first and second fibers that are mechanically entwined to one another. Even though product-byprocess claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). The Marier et al. either anticipated or strongly suggested the claimed subject matter. In the event any difference can be shown for the fiber mixture of the product-by process claims 1-11, as opposed to the product taught by the Marier et al. reference, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985).

With regard to claim 8, Marier et al. disclose the claimed invention except for the teaching that the acetate fiber is at least about 25% by weight of the total fabric. It should be noted that increasing the amount of antimicrobial acetate fiber in the fabric is a result effective variable. The

Art Unit: 1771

larger the amount of antimicrobial acetate fiber in the fabric directly affects the antimicrobial property of the fabric. As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used 25% acetate fibers in Marier's fabric, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the amount of acetate fiber in the fabric motivated by the desire to obtain a fabric with increased antimicrobial properties.

7. Claims 1-11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Denesuk et al. (US 6,196,156). Denesuk et al. disclose bedding articles possessing microbe-inhibiting properties. The lining or cover is manufactured using materials derived from polyester fibers. Portions of the fabric may be constructed of acetate fibers. Some fraction of the materials are incorporated with micro-inhibiting agents such as Triclosan (col 10, In 18-27). With regard to the intended use statements of claims 9-11, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Furthermore, Denesuk et al. disclose that the mixture of fibers under mechanical interlocking, e.g. needling (col 12, In 54-56). It should be noted that a yarn, by definition, is a strand of textile fibers that are held together. As a result, it is the Examiner's position that Denesuk's fibrous mixture is composed of a yarn since there are two fibers being needled together to form the articles.

Art Unit: 1771

With regard to the newly added limitation that the first and second fibers are entwined with one another through the use of at least one air jet, Denesuk et al. fail to disclose that the fibers are entwined with one another through the use of at least one air jet. Denesuk et al. do disclose that the mixture of fibers is needled together (col 12, In 54-56). It should be noted that the method of forming an article is not germane to the issue of patentability of the article itself. It is the Examiner's position that the fiber mixture of Denesuk et al. is identical to or only slightly different than the fiber mixture prepared by the method of the claims, because both fibrous mixtures comprise first and second fibers that are mechanically entwined to one another. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). The Denesuk et al. either anticipated or strongly suggested the claimed subject matter. In the event any difference can be shown for the fiber mixture of the product-by process claims 1-11, as opposed to the product taught by the Denesuk et al. reference, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985).

Art Unit: 1771

With regard to claim 8, Denesuk et al. disclose the claimed invention except for the teaching that the acetate fiber is at least about 25% by weight of the total fabric. It should be noted that increasing the amount of antimicrobial acetate fiber in the fabric is a result effective variable. The larger the amount of antimicrobial acetate fiber in the fabric directly affects the antimicrobial property of the fabric. As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used 25% acetate fibers in Denesuk's fabric, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the amount of acetate fiber in the fabric motivated by the desire to obtain a fabric with increased antimicrobial properties.

8. Claims 1-11 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Denesuk et al. (US 6,240,879). Denesuk et al. disclose amusement articles possessing microbe-inhibiting properties. The fibrous batting is made of polyester, cellulose acetate, triacetate fibers, and blends thereof. The microbe-inhibiting agent is applied to at least a portion of the fibers in the fibrous batting (col 3, ln 32-38). The microbe-inhibiting agent is Triclosan (col 9, ln 41 and 58). With regard to the intended use statements of claims 9-11, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Furthermore, Denesuk et al. disclose that the mixture of fibers under mechanical interlocking, e.g.

Art Unit: 1771

needling (col 11, ln 51-53). It should be noted that a yarn, by definition, is a strand of textile fibers that are held together. As a result, it is the Examiner's position that Denesuk's fibrous mixture is composed of a yarn since there are two fibers being needled together to form the articles.

With regard to the newly added limitation that the first and second fibers are entwined with one another through the use of at least one air jet, Denesuk et al. fail to disclose that the fibers are entwined with one another through the use of at least one air jet. Denesuk et al. do disclose that the mixture of fibers is needled together (col 12, In 54-56). It should be noted that the method of forming an article is not germane to the issue of patentability of the article itself. It is the Examiner's position that the fiber mixture of Denesuk et al. is identical to or only slightly different than the fiber mixture prepared by the method of the claims, because both fibrous mixtures comprise first and second fibers that are mechanically entwined to one another. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983). The Denesuk et al. either anticipated or strongly suggested the claimed subject matter. In the event any difference can be shown for the fiber mixture of the product-by process claims 1-11, as opposed to the product taught by the Denesuk et al. reference, such differences would have been obvious to one of

Art Unit: 1771

ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results; see also *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

With regard to claim 8, Denesuk et al. disclose the claimed invention except for the teaching that the acetate fiber is at least about 25% by weight of the total fabric. It should be noted that increasing the amount of antimicrobial acetate fiber in the fabric is a result effective variable. The larger the amount of antimicrobial acetate fiber in the fabric directly affects the antimicrobial property of the fabric. As a result, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used 25% acetate fibers in Denesuk's fabric, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized the amount of acetate fiber in the fabric motivated by the desire to obtain a fabric with increased antimicrobial properties.

## Response to Arguments

9. Applicant's arguments filed March 25, 2003, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that, contrary to the present invention, the Marier fibers do not contain a semi-dull polyester or that Marier does not disperse or weave antifungal materials into the fibrous mat. This argument is not persuasive because the arguments are not commensurate in scope with the claims. The claims, as presently written, do not require a semi-dull polyester fiber or for the anti-fungal materials to be dispersed or woven into the fibrous mat. The claims simply require a polyester fiber and for the second fiber to comprise at least one agent which imparts odor-absorbing and/or odor-preventing and/or odor-reducing properties to the

Art Unit: 1771

yarn. Marier's fibrous mat comprises both polyester fibers and fibers such as MICROSAFE, which is a textile product comprising acetate fibers coextruded with Triclosan. Therefore, the claims · limitations have been met. Applicant also argues that the Denesuk et al. references have microbial inhibiting agents coated onto the fibers whereas the microbial-inhibiting agents of the present invention are woven and entwined into the fiber. This argument is not persuasive because it is not commensurate in scope with the claims. The claims, as presently written, do not require that the agents be woven and entwined into the fiber. They require that the second fiber "comprise" the agent. Therefore, the claims do not preclude that the microbial inhibiting agents be coated onto the fibers. Applicant also argues that optimizing the amount of antimicrobial fiber would make the material weak. While this may be true, the Examiner's motivation for providing the material with 25% antimicrobial fibers was to increase the antimicrobial property of the material. Applicant also argues that none of the cited references disclose an "anti-detection" quality. This argument is not persuasive because the cited references are all composed of the same claimed fibers and antimicrobial agents would therefore, have the same properties as the present invention.

#### Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

Art Unit: 1771

Page 11

THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 703-305-0066. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

UCR \\ June 2, 2003

Wa Ruddock